Report to Legislature on EITE Allowance Allocation 2035-2050 Document 5: Review of options for allocating allowances to EITEs for 2035-2050



The Washington Department of Ecology (Ecology) is preparing a report about no-cost allocation to emissions-intensive, trade-exposed Industries (EITEs) under the Cap-and-Invest Program.

EITEs are important local industries and manufacturing facilities that produce a variety of products including paper, food, building materials, glass, and airplanes. In establishing the Climate Commitment Act (CCA), the Legislature recognized that EITEs faced unique challenges in reducing their greenhouse gas emissions in the early years of the Cap-and-Invest Program.

The Legislature decided to issue allowances at no cost to these industries through to 2034 and didn't specify the approach to providing no-cost allowances to EITEs for 2035-2050. Ecology is required to prepare a report to the Legislature that offers information and recommendations on how best to proceed. This report will include consideration of:

- Best practices for avoiding leakage (when EITEs relocate or limit their operations)
- Different approaches for measuring the emissions generated by EITEs per unit of production
- Opportunities and barriers for decarbonizing EITEs in Washington
- How to allocate no-cost allowance to EITEs from 2035-2050
- Implications for environmental justice outcomes, local air quality, statewide emissions limits, and revenues generated by Cap-and-Invest auction

Further information on EITEs can be found at Ecology's website: <u>Emissions-intensive, trade-exposed industries</u>.

Opportunities to provide report input

Ecology is providing multiple engagement opportunities to make sure EITEs, Tribes, covered entities, community organizations, and other interested parties can provide input into the development of Ecology's report to the Legislature. This includes establishing two advisory groups – <u>EITE Industries Advisory Group</u> and <u>EITE Policy Advisory Group</u> – as well as hosting forums for Tribes, the public, and community organizations.

Ecology is specifically seeking feedback on the approach for allocating no-cost allowances from 2035-2050 as well as understanding the potential impacts on individuals and communities where EITE facilities are located. Comments may be submitted through the <u>electronic platform until Sept.</u> 3, 2025 at 11:59 p.m.

To stay updated on the progress of the report, the advisory groups, and public meetings, sign up for the <u>EITE Industries email list</u>.

Document 5: Review of options for allocating allowances to EITEs for 2035-2050

Disclaimer

This document sets out the draft findings from the staff review of potential options for allocating allowances to emissions-intensive, trade exposed industries (EITEs) from 2035-2050 to avoid leakage and maintain the competitiveness of EITEs within the Cap-and-Invest Program. The purpose of the document is to support discussions with advisory groups and enable interested parties and the public to provide feedback on the draft findings and information.

The draft findings and information in this document do not represent the official position of Ecology or the Legislature on any policy or issue mentioned in this document. The final report will incorporate feedback received from advisory group members and other interested parties.

This is the fifth document with draft materials that Ecology has released to date as follows:

- Document 1: Best practice policies for avoiding leakage (May 1, 2025)
- Document 2: Methods for developing greenhouse gas benchmarks (May 1, 2025)
- Document 3: Framework for assessing potential methods for EITE allowance allocation (May 29, 2025)
- Document 4: Potential methods for allocating allowances to EITEs from 2035-2050 (May 29, 2025)
- Document 5: Review of options for allocating allowances to EITEs for 2035-2050 (June 26, 2025)

Section 1: Context and Background

- The Climate Commitment Act (CCA) requires Ecology to provide a report to the Legislature that "...describes alternative methods for determining the amount and a schedule of allowances to be provided to facilities owned or operated by each covered entity designated as an emissions-intensive, trade-exposed facility from January 1, 2035, through January 1, 2050. The report must include a review of global best practices in ensuring against emissions leakage and economic harm to businesses in carbon pricing programs and describe alternative methods of emissions performance benchmarking and mass-based allocation of no-cost allowances."
- Documents 1 and 2 set out the draft findings and supporting information from Ecology's review of best practice policies for addressing leakage and benchmarking EITEs.
 Document 3 provided a proposed framework for assessing the potential methods for EITE allowance allocation for 2035-2050 that were identified in Document 4.
- 3. This document builds off the draft findings and information in these four documents and assesses potential methods for allocating allowance to EITEs from 2035-2050.
- 4. This document is structured as follows:
 - a) Section 1: Context and Background, including method for assessing options.
 - b) Section 2: Key findings of review of potential options for allocating allowances to EITEs from 2035-2050.
 - c) Section 3: Detailed findings and supporting information, including assessment results for each policy option.
- 5. The purpose of this document is to enable advisory group members and other interested parties to provide feedback on the draft findings from staff assessment of potential methods for EITE allowance allocation for 2035-2050. Ecology is seeking feedback on the key findings that emerged from the draft assessment, in particular the key choices identified for developing an EITE allowance allocation approach for 2035-2050 that meets program objectives.

Method for assessing potential options for EITE allowance allocation for 2035-2050

- 6. As set out in Document 3, staff developed a two-step assessment framework for identifying and assessing potential options for EITE allowance allocation:
 - a) Step 1: Identify viable options using screening criteria
 - b) Step 2: Compare viable alternative options using assessment criteria.
- Based on feedback from members during advisory group meetings in early June, staff made some modifications to the assessment framework proposed in Document 3. These modifications included:
 - a) Inclusion of an additional criterion in Step 2 that considers the extent to which policy options enable facility-specific circumstances to be directly taken into account in policy design and/or implementation.

Document 5: Review of methods for allocation DRAFT FOR DISCUSSION

- b) Adoption of a numerical scale (-2, -1, 0, 1, 2) for scoring policy options using the assessment criteria in Step 2.
- 8. Using this modified assessment criteria (See appendix 1) staff evaluated 16 policy options within four policy design considerations for allocating allowances to EITEs from 2035-2050 that were set out in Document 4:
 - a) Policy Design Consideration 1: Establish a level playing field for EITEs producing within the jurisdiction
 - b) Policy Design Consideration 2: Identifying and targeting assistance for EITEs in Washington that are most at risk of leakage
 - c) Policy Design Consideration 3: Maintain decarbonization incentives for EITEs and reward efficient production
 - d) Policy Design Consideration 4: Align with program cap and emissions limits.
- In response to feedback received by the interim deadline of June 9, 2025, staff assessed the following two policy options¹ under Policy Design Consideration 3 and 4 respectively:
 - a) Allocating EITE allowances based on 'best available technology assessments (as proposed by members of the EITE Industries Advisory Group)
 - b) Sectoral benchmarks and reduction schedules based on technical pathways (as proposed by the Rocky Mountain Institute).
- 10. Table 1 lists all the options that were assessed under each policy design consideration, along with an abbreviated option name for referencing throughout this document.
- 11. The options listed under each of the four key design considerations are in most cases not mutually exclusive, and different combinations of options could be utilized as part of the design of the EITE allowance allocation approach for 2035-2050. This document does not assess specific combination of options, but the assessment is intended to help identify which options could form part of a viable EITE allowance allocation approach for 2035-2050 that aligns with program objectives and key design choices.
- 12. Staff also note the uncertainty around the future trade and climate policy environment affecting the Cap-and-Invest Program and EITEs in the mid-2030s and 2040s. When assessing each option, staff only considered aggregate and generalized outcomes or impacts rather that outcomes for specific sectors or covered entities. The draft assessment provided in this document should therefore be considered indicative and not predictive, and is subject to change pending feedback from advisory groups and further analysis by Ecology in developing its final report.

¹ In assessing these two options, staff chose not to assess the following option that was proposed in Document 4: 'Apply adjustments to EITE allowance allocation based on anticipated efficiency improvements or technological advancements from 2035 onwards.'

Option	Abbreviated Option Name	Description
1 a	Output-based	Continue using output-based allocation with no-cost allowances as
	allocation	the default method post-2035.
1b	Monitor carbon	Monitor carbon pricing and federal policy developments to assess
	pricing policies	changes in leakage risk.
1c	CBAM or equivalent	Implement a carbon border adjustment mechanism (CBAM) or
	policy	equivalent policy by 2035 and phase out no-cost allowances
2a	Leakage risk	Develop an objective approach for assessing leakage risk for EITEs in
	assessment	Washington, including from purchased electricity
2b	Assistance factor	Applying an 'assistance factor' that provides differentiated levels of
		no-cost allowances based on leakage risk.
2c	Purchased electricity	Provide no-cost allowances or other compensation to EITEs to
	allowances	address leakage risk from purchased electricity.
3a	Retain current	Continue using output-based allocation with facility-specific carbon-
	allocation baselines	intensity baselines as currently prescribed.
3b	Update allocation	Re-establish allocation baselines using most recent emissions and
	baselines	production data.
3c	Product-based	Transition to output-based allocation using product-based (or energy-
	benchmarking	based) benchmarks by 2035.
3d	New facility	Enable new EITE facilities to be benchmarked against a comparable
•	benchmarking	existing Washington EITE facility.
3e	Consignment	Require consignment of some allowance allocation; revenue returned
06	DAT all a set an	to EITES for emission reduction projects.
31	BAT allocation	Allocate allowances based on "best available technology" (BAT)
4-	Oan adjustment	Assessments with audits and 3–5 year reviews.
4a	Cap aujustment	Apply a cap adjustment factor to align ETE allocations with annual hudgets from 2025 enword
4 b	Appual allocation	Set an annual can on total no cost allowances to onsure it remains
40	Annual allocation	within a portion of the appual budget
40	Vot zoro industry	Prioritize allocations to industries producing goods aligned with
46	net-zero industry	Washington's not zero goals
4d	Sector-specific	Sector-specific handmarking and reduction schedules based on
Ψu	henchmarking	technical nathways as proposed by Rocky Mountain Institute (RMI)
	Senenmanning	

Table 1. Policy option descriptions and abbreviated option names for referencing.

Section 2: Key findings of review of potential options for EITE allowance allocation for 2035-2050

13. The following key findings emerged from the draft assessment of each option using the modified two-step assessment framework summarized in Appendix 1. The assessment framework was used to evaluate options against the Step 1 and 2 criteria and to identify the key policy design choices to be made in developing an EITE allowance allocation approach for 2035-2050 that aligns with the objectives of the Cap-and-Invest Program.

Policy Design Consideration 1: Establish a level playing field for EITEs producing within the jurisdiction

- 14. The draft assessment indicates that there are two viable options within Policy Design Consideration 1 and this choice becomes the foundation for the assessment of options under Policy Design Considerations 2-4.
- 15. The key choice is whether to continue providing no-cost allowances to EITEs using output-based allocation from 2035 onwards (Option 1a) or to implement a state-level carbon border adjustment mechanism and phase out allowance allocation (Option 1c).
- 16. When comparing these two options the draft assessment for Step 2 indicates that:
 - a) Option 1a (output-based allocation) scored positively on four the six assessment criteria. The main drawbacks are the fact that allocating no-cost allowances to EITEs dampens the effectiveness of carbon pricing and affects price discovery and market liquidity by reducing the proportion of auctioned allowances.
 - b) In comparison, Option 1c (CBAM or equivalent policy) scored negatively on three of the six assessment criteria. The most notable drawback of this option is the significant uncertainty around the legal frameworks and technical requirements needed for establishing a state-level carbon border adjustment mechanism or equivalent policy.
- 17. Based on the draft assessment, Option 1a (output-based allocation) emerged as the preferred option,² and this finding is the basis for the draft assessment of the other 13 options within Policy Design Considerations 2-4.
- 18. The draft assessment also indicated that neither Option 1a nor any of the options from Policy Design Considerations 2 and 3 are considered viable options unless they are combined with at least one option from Policy Design Consideration 4. This indicates that at least one of the three options from Policy Design Consideration 4 needs to form part of the EITE allocation approach for 2035-2050.³

² Preferred option means the most suitable choice based on the assessment framework in Appendix 1.

³ Unless an alternative option not assessed in this document is identified that achieves a similar outcome.

Policy Design Consideration 2: Identifying and targeting assistance for EITEs in Washington that are most at risk of leakage

- 19. The draft assessment indicates that there are three viable options within Policy Design Consideration 2. While Option 2a (Leakage risk assessment) is not an effective standalone option, both Option 2b (Assistance factor) and Option 2c (Purchased electricity allowances) are contingent on this option being implemented.
- 20. Therefore, the key policy design choices are whether to implement a more targeted approach to EITE allowance allocation based on Option 2b and/or whether to extend leakage risk mitigation to include purchased electricity based on Option 2c.
- 21. When comparing these two options, the draft assessment for Step 2 indicates that:
 - a) Option 2b (Assistance factor) and Option 2c (Purchased electricity allowances) would both mitigate leakage risk provided that they are underpinned by an objective and accurate leakage risk assessment (i.e. Option 2a).
 - b) However, both options would require additional agency resourcing and time to implement, more so for Option 2c. It is also unclear if Option 2c can be pursued in isolation from Option 2b⁴.
- 22. The draft assessment suggests that further details of the potential design of these three options is required before a preferred option could be identified. This includes, for example, gathering and analyzing data on purchased electricity and associated emissions for EITEs. However, the draft assessment does not suggest that any of these three options are an essential part of the EITE allocation approach for 2035-2050.

Policy Design Consideration 3: Maintain decarbonization incentives for EITEs and reward efficient production

- 23. The draft assessment indicates that there are six viable options within Policy Design Consideration 3. When comparing these six options, the draft assessment for Step 2 indicates that:
 - a) Option 3a (retain allocation baselines) scored positively on four of the six assessment criteria. The main drawback is that existing allocation baselines are based on facility-specific conditions in 2015-2019 and will not account for any changes to those conditions over time.
 - b) Option 3b (resetting allocation baselines) scored positively on four of the six assessment criteria. It would address the main drawback of Option 3a by accounting for facility-specific conditions in the early 2030s and provide greater leakage risk mitigation. However, it would also reduce decarbonization incentives by penalizing facilities that took early action to reduce emissions during the 2020s.

⁴ Option 2c may also be dependent on a benchmarking method being developed similar to Option 3c (product-based benchmarking).

- c) Option 3c (product-based benchmarking) scored positively on five of the six assessment criteria. The main drawback is the implementation requirements and need for technical input from facilities over an extended timeframe to develop the benchmarks.
- d) Option 3d (new facility benchmarking) is only applicable to new facilities so it cannot be directly compared to the other five options. However, it could provide some of the same benefits as product-based benchmarking (Option 3c).
- e) Option 3e (consignment) scored positively on five of the six assessment criteria. The main drawback is that it imposes new technical requirements on EITEs to demonstrate that consigned allowance funds will be used on emission reduction projects. This option could also be paired with any of the other four options because it does not directly affect allocation baselines.
- f) Option 3f (BAT allocation) scored negatively on two of the six criteria. This was due to the significant implementation and technical requirements to establish an auditing regime, and the unpredictability of the outcomes of the BAT process compared to other allocation approaches. However, this option scored highest in terms of accounting for facility-specific conditions.
- 24. This draft assessment suggests that any significant changes to the existing EITE allocation baselines need to provide important additional benefits given that Option 3a (retain allocation baselines) scored relatively highly compared to most alternative options. Therefore, further analysis is required to consider how these options would interact when combined with a preferred option from Policy Design Consideration 4 before a preferred option could be identified.

Policy Design Consideration 4: Align with program cap and emissions limits

- 25. As noted above, identifying preferred options from Policy Design Consideration 4 is one of the most critical design choices for the EITE allocation approach for 2035-2050.
- 26. The draft assessment indicates that there are four viable options within Policy Design Consideration 2. When comparing these four options, the draft assessment for Step 2 indicates that Option 4b (Annual allocation cap) scored negatively on three of the six criteria while Option 4d (sector-based benchmarks) scored negatively on two of the six criteria. On this basis, Option 4b and Options 4d were considered unsuitable.
- 27. This means that that the key choice is between Option 4a (Cap adjustment factor) and 4c (Net-zero industry prioritization). When comparing these two options the draft assessment for Step 2 indicates that:
 - a) Option 4a (Cap adjustment factor) scored positively on five of the six criteria. The main drawback is that it may potentially increase leakage risk after 2034 depending on the international trade and climate policy context in the late 2030s and 2040s. In contrast, Option 4c (Net-zero industry prioritization) may help mitigate leakage risk for those facilities manufacturing products consistent with

statewide net-zero emissions limits by signaling a commitment to supporting those industries within Washington. However, for both options there remains uncertainty around leakage risk after in the event EITE facilities have not progressed decarbonization plans and projects ahead of 2035.

- b) Option 4c (Net-zero industry prioritization) scored positively on four of the six criteria and provides more targeted decarbonization incentives compared to Option 4a (Cap adjustment factor). The main drawbacks of Option 4c (Net-zero industry prioritization) is that it would require more resourcing and time to implement, and there is uncertainty around the criteria and method for this option given it represents a novel approach for EITE allowance allocation.
- 28. Based on the draft assessment, Option 4a (Cap adjustment factor) would likely emerge as the preferred option. However, the draft assessment also indicates that further details of the potential design of Options 4a and 4c is required before a preferred option could be identified. This includes, for example, whether a cap decline factor would be applied uniformly across all EITEs (Option 4a) ⁵ and how to determine the extent to which products are consistent with statewide net-zero emissions limits (Option 4c).
- 29. In addition, further assessment is required on how these options would interact if combined with preferred options from Policy Design Considerations 2 and 3, which have yet to be confirmed.

Other considerations and findings from the draft assessment

- 30. As noted above, several of the potentially preferred options from Policy Design Considerations 2 and 3 were assessed as imposing additional implementation and technical requirements. This includes Option 2c (purchased electricity allowances), Option 3c (product-based benchmarking), Option 3e (consignment), and Option 3f (BAT allocation). This suggests that it is likely infeasible to pursue all these preferred options in combination, and choices need to be made about which of combination of options can provide the most overall benefits without excessive implementation requirements.
- 31. In addition, any preferred combination of options will require further testing and analysis, including consideration of economic impacts and environmental justice outcomes among others. This may result in a re-evaluation of the viability or efficacy of those preferred options. As noted in Document 3, these considerations require sufficient detail about the design of policy options before they can be adequately assessed, and staff are gathering information to help assess these considerations and to determine how they can inform assessment of preferred options and combinations.
- 32. Staff intend to assess combinations of options and these other considerations following discussion with advisory groups on this draft assessment of options.

⁵ The technical pathways approach proposed by RMI provides one example of a potential method for considering differentiation across EITEs.

Section 3: Detailed findings and supporting information

- 33. This section sets out the detailed assessment of each option for allocating allowances to EITEs from 2035-2050 within each of the four policy design considerations. This includes:
 - a) Description of each proposed option, including dependencies and anticipated policy implementation timeframes.
 - b) Draft assessment using Step 1 criteria to assess viability
 - c) Draft assessment using Step 2 criteria to compare options
 - d) Summary of draft assessment results.
 - e) Summary of Step 2 assessment scores for all assessed options (Table 14).
- 34. In undertaking the assessment, staff made certain assumptions and judgements about the potential design and impacts of the assessed policy options. These assumptions and judgements are documented in this section to the extent possible.
- 35. In assessing the options, staff assumed each option was being implemented in isolation unless otherwise noted. When assessing each option against the Step 1 and Step 2 criteria, staff considered aggregate and generalized outcomes or impacts rather than outcomes for specific sectors or covered entities.
- 36. As noted above, the options assessed below are in most cases not mutually exclusive and different combinations of options could be utilized within a future EITE allowance allocation policy. This document **does not** assess combinations of options, but readers can refer to Document 4 for illustrative examples of how different options could be used in combination.⁶
- 37. As noted above, there is uncertainty around the future trade and climate policy environment affecting the Cap-and-Invest Program and EITEs in the mid-2030s and 2040s. The draft assessment against each criterion provided below should therefore be considered indicative only and not predictive, and is subject to change pending feedback from advisory groups and further analysis.

⁶ See Document 4, Section 3.

Policy Design Consideration 1: Establish a level playing field for EITEs producing within the jurisdiction

#	Description of options and policy design assumptions	Additional design requirements or dependencies, including anticipated policy implementation timeframes
1a	Continue providing no-cost allowances to EITEs from 2035 onwards using an output- based allocation method that aligns with program objectives. For the purpose of this assessment, staff assumed this option is largely based on existing policies settings for EITE allowance allocation under the CCA and Cap-and-Invest Program rule.	Most of the options assessed in Policy Design Considerations 2-4 are contingent on this option being implemented. <u>Anticipated policy implementation</u> <u>timeframe:</u> This option involves continuation of the existing EITE allowance allocation policy from 2035 onwards, and therefore the assessment assumes the key aspects of the policy are already implemented.
1b	Periodically monitor developments in carbon pricing policies in key competitor jurisdictions and relevant federal policies to identify any major changes in leakage risk that may warrant changes to EITE policies in Washington.	Anticipated policy implementation timeframe: For this assessment it is assumed this would be undertaken every 3-4 years as part of existing program evaluation requirements, commencing in 2027.
1c	Explore other policies or strategies that could be adopted in Washington to mitigate leakage and maintain competitiveness of EITEs. For the purpose of this assessment, staff assumed this option is based on implementing a CBAM or equivalent policy from 2035 onwards with no-cost allowances phased out around the same time.	This option would require further work to assess whether a CBAM can be effectively implemented at the state level (unless a national mechanism was implemented in the meantime), including legal frameworks and key policy design and implementation considerations. Anticipated policy implementation timeframe: 48 months minimum ⁷ to develop and implement the required policy details for the CBAM and approach for phasing out EITE allowance allocation.

Table 2. Three options identified and assessed for Policy Design Consideration 1.

⁷ Does not account for potential legal challenges that may arise in response to implementing a state-level CBAM.

Step 1 - Assessment of viability of policy options

	Option 1a - Continue providing no-cost allowances to EITEs from 2035 onwards using an output-based allocation method that aligns with program objectives.	Option 1b - Periodically monitor developments in carbon pricing policies in key competitor jurisdictions and relevant federal policies to identify any major changes in leakage risk
Criterion		gg
Alignment with CCA requirements: Does the option align with Ecology's Cap-and- Invest allowance budgets (RCW 70A.45.020) and auctioned allowance requirements (RCW 70A.65.100)?	Not on its own (unless combined with options from Policy Design Consideration 4).	Not applicable - no direct impacts on allowance allocation.
Provides for new market entrants: Does the option enable new, eligible EITE facilities to access no-cost allowances?	Yes.	Not applicable - no direct impacts on allowance allocation.
Maintains flexibility for compliance: Does the option allow EITEs to identify least cost compliance strategies, including purchasing, banking, and selling of allowances?	Yes.	Not applicable - no direct impact on compliance.
Compatible with market linkage: Is the proposed option compatible with plans to link Washington's Cap-and-Invest market with those in California and Québec?	Most likely yes (unless any concerns raised by CA or QC).	Not applicable - no direct impact on linkage.
Should this option progress to Step 2?	Yes, assuming screening criteria is revisited to confirm viability.	No, not a viable option to assess in Step 2 because it has no direct impacts on allowance allocation.

Table 3. Results of the Step 1 assessment for the three options that were identified for Policy Design Consideration 1.

Summary of Step 1 assessment and additional commentary for Policy Design Consideration 1

- 38. The draft assessment for Step 1 indicates that Option 1b is not a viable option to assess in Step 2 because it has no direct impacts on allowance allocation. However, monitoring developments in carbon pricing policies in key competitor jurisdictions and relevant federal policies should form part of periodic program evaluations.
- 39. Both Option 1a and 1b were considered viable for progressing to the Step 2 assessment assuming that screening criteria is revisited to confirm viability for those criteria where there was noted uncertainty. For example, Option 1a was not considered likely to be viable on its own and must be combined with one or more options from Policy Design Consideration 4.

Option 1c - Implement a CBAM or equivalent policy from 2035 onwards and phase out no-cost allowances
Yes, but only provided that a CBAM can be implemented that covers all products being produced by EITEs in WA.
Not applicable - once CBAM in place, no-cost allowances would be phased out.
Yes.
Unknown - would require further analysis and engagement with those jurisdictions.
Yes, assuming screening criteria is revisited to confirm viability.

Step 2 – Comparison of viable alternatives

Table 4. Results of the Step 2 assessment for the two viable options assessed in Step 1 for Policy Design Considerations 1.

	Option 1a - Continue providing no-cost allowances to EITEs from 2035 onwards using an output-based allocation method that aligns with program objectives Score / Summary of Assessment		Option 1b - Periodically monitor developments in carbon pricing policies in key competitor jurisdictions and relevant federal policies in order to identify any major changes in leakage risk	Option 1c - Implement a state-level CBAM or equivalent policy from 2035 onwards and phase out no-cost allowances		
Criterion				Scor	e / Summary of Assessment	
Mitigates emissions leakage: to what extent does the option include mechanisms to identify and mitigate emissions leakage (i.e. ability to pass through compliance costs & maintain market share)?	2	Mitigates emissions leakage through allocation of no-cost allowances which reduces direct compliance costs and enables EITEs to maintain market share (imports and exports).	ough ces nce ntain orts).		Mitigates emissions leakage by imposing equivalent compliance costs on product imports enabling EITEs to pass-through compliance costs for goods sold within WA, but not necessarily sold out of state ⁸ .	
Maintains incentives for decarbonization: to what extent does the option maintain incentives for EITEs to reduce emissions intensity of production within Washington?	conization: to what extent atives for EITEs to reduce tion within Washington?Output-based allocation rewards investments in more efficient/lower carbon production in WA.			1	Under a CBAM the carbon price would provide direct incentives for decarbonization within WA, depending on EITE facility market share within WA versus out of state.	
Supports market functionality: to what extent does the option support stable, competitive, and efficient market operations?	-1	Providing no-cost allowances limits price signals and price discovery (depending on proportion of EITE compliance costs they cover) and can affect market liquidity (depending on proportion of total EITE allowances of program budgets).	Not deemed a viable option in Step 1, therefore not assessed in Step 2.	2	Replacing no-cost allowances with CBAM means EITEs are subject to the full carbon price, which improves price signals, price discovery, and liquidity.	
Minimizes administrative / implementation costs and technical requirements: to what extent does the option require agency resourcing to implement/can be implemented using existing administrative systems, and additional technical requirements for EITEs?	nimizes administrative / implementation costs and chnical requirements: to what extent does the option re agency resourcing to implement/can be implemented existing administrative systems, and additional technical requirements for EITEs?Can be implemented within current administrative systems and resources, depending on the design of the EITE allowance allocation approach for 2035-2050.			-2	Requires significant additional resources, data, and analysis to design and implement a CBAM	
Provides clarity, objectivity, and predictability: to what extent does the option provide clear, objective, and transparent methods to determine future allocations, and enables EITEs to plan for compliance, taking into account estimated policy implementation timeframes?		EITEs can plan on the basis of their experience with the existing output- based allocation framework.		-2	The uncertainty surrounding the legal standing and feasibility of implementing a state-level CBAM would make it more difficult for EITEs to plan for compliance	
Accounts for facility-specific conditions: to what extent does the option enable facility- specific circumstances (e.g. production and emissions, and implementation timeframes for facility upgrades) to be taken into account?	0	No direct or negligible impacts - will depend on the design of the EITE allowance allocation approach for 2035-2050.		-1	Replacing no-cost allowances with CBAM would likely remove any ability to consider facility-specific circumstances.	

⁸ For example, the EU CBAM does not provide any compensation to address the carbon costs faced by EU exporters competing in global markets without equivalent carbon pricing.

Summary of Step 2 assessment and additional commentary for Policy Design Consideration 1

40. When comparing these two options the draft assessment for Step 2 indicates that:

- a) Option 1c (CBAM) scored negatively on three of the six assessment criteria. The most notable drawbacks of this option are the significant implementation challenges and uncertainty around the legal standing on a state-level carbon border adjustment mechanism.
- b) In comparison, Option 1a (output-based allocation) scored positively on four the six assessment criteria. The primary identified drawback being the well-documented fact that allocating no-cost allowances to EITEs dampens the impacts of carbon prices and affects price discovery and liquidity.

Policy Design Consideration 2: Identifying and targeting assistance for EITEs in Washington that are most at risk of leakage

#	Description of options and policy design assumptions	Additional design requirements or dependencies, including anticipated policy implementation timeframes
2a	Developing an objective approach for assessing leakage risk for EITEs in Washington, including from purchased electricity. For the purpose of this assessment, staff assumed this would be modelled on the approach used by CARB to assess leakage risk. ⁹	Requires further work to determine suitable quantitative and qualitative criteria and methods for assessing leakage risk for EITEs in Washington. <u>Anticipated policy implementation timeframe:</u> 12-18 months to complete rulemaking to establish criteria and methods for assessing leakage risk (if authorized under statute).
2b	Applying an 'assistance factor' that provides differentiated levels of no- cost allowances to industrial sectors based on an assessment of leakage risk facing each sector. For the purpose of this assessment, staff assumed this would be similar to the original approach proposed by CARB to establish assistance factors depending on the level of leakage risk. ¹⁰	Contingent on further work to develop an objective approach for assessing leakage risk and determining the basis for any differentiation between sectors. Anticipated policy implementation timeframe: 18-36 months to complete rulemakings to establish criteria and methods for assessing leakage risk and develop assistance factors for each sector (if authorized under statute; assumes two separate rulemakings conducted in at least two phases).
2c	Provide no-cost allowances or other compensation to EITEs to address any leakage risk associated with purchased electricity.	Contingent on further work to assess leakage risk associated with purchased electricity in Washington and the development of a method for determining the amount of allowances or compensation to be provided to EITEs. Could be implemented with or without the 'assistance factor' option above. Anticipated policy implementation timeframe: 24-36 months to complete rulemakings to establish criteria and methods for assessing leakage risk from purchased electricity and develop methods for allocating allowances or providing other compensation (if authorized under statute).

Table 5. Three options were identified and assessed for Policy Design Consideration 2.

 ⁹ California Air Resources Board (2010) Cap-and-Trade Regulation ISOR <u>Appendix K.</u>
¹⁰ Allowance Allocation to Industrial Facilities | California Air Resources Board.

Step 1 Assessment of viability of policy options

	Option 2a - Developing an objective approach for assessing leakage risk for EITEs in Washington, including from purchased electricity	Option 2b - Applying an 'assistance factor' that provide differentiated levels of no-cost allowances to industria sectors based on leakage risk	
Criterion			
Alignment with CCA requirements: Does the option align with Ecology's Cap-and- Invest allowance budgets (RCW 70A.45.020) and auctioned allowance requirements (RCW 70A.65.100)?	Not on its own (unless combined with options from Policy Design Consideration 4).	Not on its own (unless combined with options from Policy Design Consideration 4).	٦
Provides for new market entrants: Does the option enable new, eligible EITE facilities to access no-cost allowances?	Yes (no direct or indirect impacts, but will further clarify eligibility for EITEs to receive no-cost allowances).	Yes (no direct or indirect impacts on eligibility of new EITEs to receive no-cost allowances).	Y
Maintains flexibility for compliance: Does the option allow EITEs to identify least cost compliance strategies, including purchasing, banking, and selling of allowances?	Yes.	Yes.	
Compatible with market linkage: Is the proposed option compatible with plans to link Washington's Cap-and-Invest market with those in California and Québec?	Most likely yes (unless any concerns raised by CA or QC).	Most likely yes (unless any concerns raised by CA or QC).	M
Should this option progress to Step 2?	Yes, assuming screening criteria is revisited to confirm viability.	Yes, assuming screening criteria is revisited to confirm viability.	

Table 6. Results of the Step 1 assessment for the three options that were identified for Policy Design Consideration 2.

Summary of Step 1 assessment and additional commentary for Policy Design Consideration 2

41. The draft assessment for Step 1 indicates that these three options were considered viable for progressing to the Step 2 assessment assuming that screening criteria is revisited to confirm viability for those criteria where there was noted uncertainty. In particular, none of the three options were considered likely to be viable on their own and must be combined with one or more options from Policy Design Consideration 4.

tion 2c - Provide no-cost allowances or other mpensation to EITEs to address any leakage risk sociated with purchased electricity.
lot on its own (unless combined with options from Policy Design Consideration 4).
es (no direct or indirect impacts on eligibility of new EITEs to receive no-cost allowances).
Yes.
lost likely yes (unless any concerns raised by CA or QC).
Yes, assuming screening criteria is revisited to confirm viability.

Step 2 – Comparison of viable alternatives

Table 7. Results of the Step 2 assessment for the three viable options assessed in Step 1 for Policy Design Considerations 2.

	Option 2a for asses Washing electricit	tion 2a - Developing an objective approach Option 2b - Applying an 'assistance factor' that assessing leakage risk for EITEs in provides differentiated levels of no-cost allowances to shington, including from purchased industrial sectors based on leakage risk ctricity		Optio compe asso	n 2c - Provide no-cost allowances or other nsation to EITEs to address any leakage risk ciated with purchased electricity (without assistance factor)	
Criterion	Score	/ Summary of Assessment	Score	/ Summary of Assessment	Score	/ Summary of Assessment
Mitigates emissions leakage: to what extent does the option include mechanisms to identify and mitigate emissions leakage (i.e. ability to pass through compliance costs & maintain market share)?	1	Identifies leakage risk only, does not directly mitigate leakage risk (unless combined with options 2b or 2c).	2	Identifies and mitigates leakage risk in a more targeted way, assuming that leakage risk is identified accurately under option 2(a).	2	Extends leakage risk identification and mitigation to include compliance costs from purchased electricity, assuming that leakage risk identified accurately under option 2a.
Maintains incentives for decarbonization: to what extent does the option maintain incentives for EITEs to reduce emissions intensity of production within Washington?	0	No direct or negligible impact - unless combined with options 2b or 2c.	1	Better targeting of EITE allocation based on leakage risk should improve decarbonization incentives.	1	Better targeting of EITE allocation based on electricity usage should improve decarb incentives.
Supports market functionality: to what extent does the option support stable, competitive, and efficient market operations?	0	No direct or negligible impact - unless combined with options 2b or 2c	1	Better targeting of EITE allocation based on leakage risk should improve price signals.	1	Better targeting of EITE allocation based on electricity usage should improve price signals.
Minimizes administrative / implementation costs and technical requirements: to what extent does the option require agency resourcing to implement/can be implemented using existing administrative systems, and additional technical requirements for EITEs?	-1	Requires agency resourcing to develop objective approach for assessing leakage risk (likely through rulemaking).	-1	Requires agency resourcing to implement objective approach for assessing leakage risk, i.e. Options 2a and design assistance factor (through rulemaking).	-2	Requires agency resourcing to implement objective approach for assessing leakage risk, i.e. Options 2a and details of benchmarking electricity use or other allocation methods (through rulemaking).
Provides clarity, objectivity, and predictability: to what extent does the option provide clear, objective, and transparent methods to determine future allocations, and enables EITEs to plan for compliance, taking into account estimated policy implementation timeframes?	0	Identifies leakage risk only - limited impact unless combined with options 2b and/or 2c.	1	Provides transparency and objectivity through assistance factor, extent of predictability depends on timeframes for implementing this option (i.e. creates uncertainty until rulemaking completed).	1	Provides transparency and objectivity through benchmarks, extent of predictability depends on timeframes for implementing this option (i.e. creates uncertainty until rulemaking completed).
Accounts for facility-specific conditions: to what extent does the option enable facility-specific circumstances (e.g. production and emissions, and implementation timeframes for facility upgrades) to be taken into account?	0	Leakage risk assessment would mostly be based on sector level data that may not account for facility-specific conditions, unless qualitative criteria used to account for facility-specific issues.	-1	Assistance factor would likely be based on sector level leakage risk assessments, unless rules enable facility-specific conditions to be considered in establishing assistance factors.	0	Depends on the methods used to determine allowance allocation or compensation for purchased electricity: could be based on sectoral benchmarks or facility-specific electricity consumption.

Summary of Step 2 assessment and additional commentary for Policy Design Consideration 2

- 42. The draft assessment for Step 2 indicates that Option 2a is not an effective standalone option, but both Option 2b and 2c are contingent on this option being implemented to assess leakage risk. The additional benefit of Option 2a is that it would allow leakage risk to be reassessed in a consistent manner over time; however, the benefits are limited if not linked to specific policy requirements.
- 43. When comparing options 2b and 2c, the draft assessment shows that both options have the same or similar positive scores across 4 of the 6 criteria. Both options have negative scores in terms of Minimizes administrative / implementation costs and technical requirements because they would require additional agency resourcing to implement, more so for Option 2c. While in terms of accounting for facilityspecific conditions, Option 2b has a negative score while Option 2c was deemed neutral, although there is scope for both options to include some facility-specific considerations in policy design.

Policy Design Consideration 3: Maintain decarbonization incentives for EITEs and reward efficient production

# 3a	Description of options and policy design assumptions Continue using the output-based allocation method with facility-specific carbon-intensity baselines as currently prescribed in the CCA from 2035 onwards. Under this option EITEs would retain their existing carbon-intensity baselines as assigned by Ecology for calculating no-cost	Additional design requirements or dependencies, including anticipated policy implementation timeframes Anticipated policy implementation timeframe: On its own, this option does not require any major changes to existing policy, so implementation timeframe is negligible.
	allowance allocation along with any adjustments made to align with program budgets or other objectives.	
3b	Re-establish allocation baselines for EITEs from 2035 onwards using the most recently available emissions and production data. Under this option the existing approach to calculating carbon-intensity or mass-based baselines for EITEs would largely remain the same, but the input data would be updated using the most recent emissions years (e.g. average emissions intensity during years 2031-2033).	This option is contingent on Option 3a being implemented. <u>Anticipated policy implementation</u> <u>timeframe:</u> 3-6 months to calculate and issue updated baselines, but can't be completed until at least 2033 (and until authorized under statute).
3c	Transition EITEs to product-based benchmarks by 2035 and use output-based allocation with benchmarking from 2035 onwards. This would involve replacing the existing carbon-intensity baselines with product-based benchmarks (or energy-based benchmarks if product-based benchmarks are not feasible).	This option would be contingent on the development of suitable product-based benchmarks for each industrial sector through engagement with facilities and industry experts. <u>Anticipated policy implementation</u> <u>timeframe:</u> 24-36 months to gather the necessary data and complete rulemaking (if authorized under statute).
3d	Enable new EITE facilities to be benchmarked against a comparable EITE facility in Washington. This would involve new EITE facilities being assigned an allocation baseline that is equivalent to the carbon-intensity baseline of an EITE facility in Washington that produces comparable products.	This option would be contingent on new EITE facilities manufacturing comparable products that are produced by existing EITEs in Washington. <u>Anticipated policy implementation</u> <u>timeframe:</u> 6-12 months to complete rulemaking (unless specified in statute).

Table 8. Six options were identified and assessed for Policy Design Consideration 3.

#	Description of options and policy design assumptions	Additional design requirements or dependencies, including anticipated policy implementation timeframes
3e	Require the consignment of a portion of EITE allowance allocation for each facility with associated revenues to be returned to EITEs provided the funds are used for emission reduction projects. In assessing this option, staff assumed a similar approach to consignment as adopted by Québec ¹¹ .	This option would be contingent on the development of suitable qualifying criteria, timeframes, and other processes for governing the use of the revenues associated with the EITE consigned allowances. <u>Anticipated policy implementation timeframe:</u> 12-24 months to establish policy framework and complete rulemaking once authorized under statute (unless framework specified directly in statute).
3f	Allocation EITE allowances based on 'Best Available Technology' assessments from 2035 onwards. For the purpose of this assessment, staff have assumed this option would be based upon a best available technology assessment that that used in the GEMM 1 rule in Colorado ¹² , which considers both energy management practices and emission reduction technologies, and requires third party auditing.	This option would be contingent on the development of a suitable method for determining best available technology for each facility, including the establishment of an auditing regime of qualified third- party auditors to ensure credibility and veracity of the Best Available Technology assessments. <u>Anticipated policy implementation timeframe:</u> 36-48 months: 18-24 months to complete rulemaking to establish methods and auditing regime (if authorized under statute) plus additional 12-24 months to complete determinations on best available technology for each facility, which likely could not be completed until at least 2033 if order to ensure assessments up-to-date.

¹¹ Ministère de l'Environnement, Quebec: <u>Projects eligible for payment from consigned funds</u>.

¹² Colorado Department of Public Health and Environment: <u>Greenhouse Gas Emissions and Energy</u> <u>Management for Manufacturing (GEMM 1)</u>

Step 1 Assessment of viability of policy options

Table 9. Results of the Step 1 assessment for the six options that were identified for Policy Design Consideration 3.

Critorion	Option 3a - Continue using the output-based allocation method with facility- specific carbon-intensity baselines as currently prescribed in the CCA from	Option 3b - Re-establish allocation baselines for EITEs from 2035 onwards using the most recently available emissions and production data	Option 3c - Transition EITEs to product-based benchmarks by 2035 and use output-based allocation with benchmarking from 2035	Option 3d - Enable new EITE facilities to be benchmarked against a comparable EITE facility in Washington.	Option 3e - Require the consignment of a portion of EITE allowance allocation with associated revenues to be used to the fund EITE emission reduction	Option 3f - Apply adjustment to allowances based on Best Available Technology Assessments
	2039 Oliwarus.		offwards.	Nictors its come (meloco	projects.	
Augnment with CCA	NOT ON Its OWN (Unitess	Not on its own (unless	Not on its own (unless	Not on its own (unless	Not on its own (unless	Not on its own (unless
requirements: Does the option	Combined with options from	combined with options from	combined with options from	Combined with options from	Combined with options from	Combined with options from
align with Ecology's Cap-and-	Policy Design Consideration	Policy Design Consideration	Policy Design Consideration	Policy Design Consideration	Policy Design Consideration	Policy Design Consideration
Invest allowance budgets (RCW	4).	4).	4).	4).	4).	4).
70A.45.020) and auctioned						
RCW 70A.85.100)?	Vee	Veo	Vee	Vee	Vee	Vee
entrente: Deep the ention enable	res.	res.	res	res.	res.	res
now oligible EITE facilities to						
new, eligible Ene facilities to						
access no-cost allowances :						
Maintains flexibility for	Yes.	Yes.	Yes	Yes.	Yes.	Yes
compliance: Does the option						
allow EITEs to identify least cost						
compliance strategies, including						
purchasing, banking, and selling						
of allowances?						
Compatible with market	Most likely yes (unless any	Most likely yes (unless any	Most likely yes (unless any	Most likely yes (unless any	Most likely yes (unless any	Most likely yes (unless any
linkage: Is the proposed option	concerns raised by CA or	concerns raised by CA or	concerns raised by CA or	concerns raised by CA or	concerns raised by CA or	concerns raised by CA or
compatible with plans to link	QC).	QC).	QC).	QC).	QC).	QC).
Washington's Cap-and-Invest						
market with those in California						
and Quebec?				No		
Should this option progress to	res, assuming screening	res, assuming screening	res, assuming screening	res, assuming screening	res, assuming screening	res, assuming screening
Step 2?	criteria is revisited to	criteria is revisited to	criteria is revisited to	criteria is revisited to	criteria is revisited to	criteria is revisited to
	commin viability.	commin viability.	commin viability.	commin viability.	commin viability.	commin viability.

Summary of Step 1 assessment and additional commentary for Policy Design Consideration 3.

44. The draft assessment for Step 1 indicates that these six options were considered viable for progressing to the Step 2 assessment assuming that screening criteria is revisited to confirm viability for those criteria where there was noted uncertainty. In particular, none of the six options were considered likely to be viable on their own and must be combined with one or more options from Policy Design Consideration 4.

Step 2 – Comparison of viable alternatives

Table 10. Results of the Step 2 assessment for the six viable options assessed in Step 1 for Policy Design Consideration 3.

	Optio allocat intensit	n 3a - Continue using the output-based ion method with facility-specific carbon- y baselines as currently prescribed in the CCA from 2035 onwards	Optior EITEs f av	n 3b - Re-establish allocation baselines for rom 2035 onwards using the most recently ailable emissions and production data	Option 3c - Transition EITEs to product-based benchmarks by 2035 and use output-based allocation with benchmarking from 2035 onwards				
Criterion	Score	/ Summary of Assessment	Score	/ Summary of Assessment	Score	/ Summary of Assessment			
Mitigates emissions leakage: to what extent does the option include mechanisms to identify and mitigate emissions leakage (i.e. ability to pass through compliance costs & maintain market share)?	1	Helps mitigate emissions leakage provided that allocation baselines remain representative of each facility's production and emissions profile from 2035 onwards.	2	Helps mitigate emissions leakage by updating allocation baselines to reflect actual emissions intensity of production in early 2030s.	1	Helps mitigate emissions leakage provided facilities are performing at or below the benchmark.			
Maintains incentives for decarbonization: to what extent does the option maintain incentives for EITEs to reduce emissions intensity of production within Washington?	1	Maintains incentive mechanism for existing EITEs to reduce emissions intensity, but this does not directly reward investment in new, low/zero carbon EITE facilities due to absence of benchmarking.	-1	On its own, this option could reduce incentives to reduce emissions because facilities with higher emissions in early 2030s would have a higher baseline.	2	Benchmarking rewards most efficient facilities in WA and rewards investment in new, low/zero carbon EITE facilities.			
Supports market functionality: to what extent does the option support stable, competitive, and efficient market operations?	0	No direct, or negligible, impacts.	0	No direct, or negligible, impacts.	1	Published benchmarks provide enhanced price signals, particularly for new market entrants			
Minimizes administrative / implementation costs and technical requirements: to what extent does the option require agency resourcing to implement/can be implemented using existing administrative systems, and additional technical requirements for EITEs?	2	Requires no additional resources, systems or technical requirements	2	Requires no additional resources, systems or technical requirements.	-1	Requires additional resources, data, and technical requirements/input from EITEs.			
Provides clarity, objectivity, and predictability: to what extent does the option provide clear, objective, and transparent methods to determine future allocations, and enables EITEs to plan for compliance, taking into account estimated policy implementation timeframes?	1	Existing EITEs can plan around their approved allocation baselines and allocation methods as per rule, albeit new EITEs cannot plan in the same way (due to absence of benchmarking).	1	EITEs can plan around existing allocation baselines and allocation methods as per rule, but with less certainty around allocation baseline reset.	1	Establishes objective criteria/method for benchmarking and provides predictability on allowance allocation for EITEs, but only once rulemaking completed.			
Accounts for facility-specific conditions: to what extent does the option enable facility-specific circumstances (e.g. production and emissions, and implementation timeframes for facility upgrades) to be taken into account?	-1	Existing allocation baselines are largely based on facility-specific conditions in 2015-2019 but does not account for any changes in those conditions.	1	Resetting allocation baselines would enable any changes in certain facility conditions (production and emissions profile) to be accounted for.	1	Benchmarking can account for facility-specific considerations depending on method chosen.			

Table 10 continued.

	Opt	tion 3d - Enable new EITE facilities to be	Optior	Option 3e - Require the consignment of a portion of						
	bench	marked against a comparable EITE facility	EITE al	lowance allocation with associated revenues		1				
		in Washington.	to b	e used to the fund EITE emission reduction						
				projects.						
Criterion	Score	/ Summary of Assessment	Score	/ Summary of Assessment	Score					
Mitigates emissions leakage: to what extent	0	No direct, or negligible, impacts.	1	Helps mitigate emissions leakage by providing	1					
does the option include mechanisms to identify				up-front financial value of allowances to						
and mitigate emissions leakage (i.e. ability to				invest in decarbonization projects to enhance						
pass through compliance costs & maintain				competitiveness.						
market snare)?										
Maintains incentives for decarbonization: to	2	Provides strong incentives for investment in	2	Directly incentivizes emissions reductions for	1					
what extent does the option maintain		new, low-carbon facilities.		the portion of no-cost allowances that are						
incentives for EITEs to reduce emissions				consigned, may also help identify new						
intensity of production within Washington?				opportunities for state support for EITEs.						
Supports market functionality: to what extent	0	No direct, or negligible, impacts.	2	Increases market liquidity and price discovery	0					
does the option support stable, competitive,				by having more allowances auctioned.						
and efficient market operations?										
Minimizes administrative / implementation	1	Can be implemented within current	-1	Likely requires new administrative systems for	-2					
costs and technical requirements: to what		administrative systems, with limited		assessing projects and approving allocation of						
extent does the option require agency		rulemaking.		consigned allowances, and imposes new		а				
resourcing to implement/can be implemented				technical requirements on EITEs (i.e.						
using existing administrative systems, and				conditions for receiving consigned allowance						
additional technical requirements for EITEs?				funds).		-				
Provides clarity, objectivity, and	1	Establishes objective criteria/method for	1	Establishes objective criteria/method for	-1	E				
predictability: to what extent does the option		benchmarking new facilities, provides some		receiving consigned funds, provides		E				
provide clear, objective, and transparent		limited predictability for new facilities only.		predictability on allowance allocation once		i				
methods to determine future allocations, and				rulemaking is completed.						
inte account estimated policy implementation										
timeframes?										
Accounts for facility specific	0	No direct, or pogligible, impacts	1	Critoria for consigned funds could onable	2	-				
conditions: to what extent does the option	U	no direct, of negligible, impacts.		facility-specific conditions to be accounted	2					
enable facility-specific circumstances (e.g.				for in implementation of projects						
production and emissions and implementation										
timeframes for facility upgrades) to be taken										
into account?										

f - Apply adjustment to allowances based on Best Available Technology Assessments (BAT)

/ Summary of Assessment

Helps mitigate emissions leakage provided facilities are performing at or below the benchmark (BAT).

BAT assessments may limit decarbonization incentives to existing technology and reduce investment in research and development for longterm low/zero carbon technologies. No direct, or negligible, impacts.

Requires significant additional resources and new administrative system to establish auditing regime and imposes new technical requirements on EITEs to comply with new BAT assessment requirements.

Establishes objective criteria/method for determining BAT for EITEs, but outcomes of the BAT assessments are not predictable in advance and what constitutes BAT will change over time, making allowance allocation less predictable for EITEs.

BAT assessments would be based on facility specific conditions.

Summary of Step 2 assessment and additional commentary for Policy Design Consideration 3.

45. The draft assessment for Step 2 indicates that Option 3d cannot be readily compared to the other options, as it is only applicable to new facilities.46. When comparing the other five options using the criteria the draft assessment indicates that:

- a) Option 3a (retain current allocation baselines) scores positively or neutral on all criteria except one (accounting for facility specific conditions).
- b) Option 3c (product-based benchmarking) scores positively on all criteria except one (implementation), because it requires significant resourcing to implement and technical input from facilities over an extended timeframe.
- c) Option 3e (consignment) also scored positively on all criteria except one (implementation), because it imposes new technical requirements on EITEs. Notably, this option could be paired with any of the other four options because it does not directly affect allocation baselines.
- d) Option 3f (BAT allocation) scored positively on three criteria but negatively on two criteria due to the significant implementation and technical requirements, and unpredictability of the outcomes of the BAT process. However, it was the only option that scored 2 for taking into account facility specific conditions.

implement and technical input from facilities s. Notably, this option could be paired with any of ements, and unpredictability of the outcomes of

Policy Design Consideration 4: Align with program cap and emissions limits

Table 11. Four options were identified and assessed for Policy Design Consideration 4.

		Additional design requirements or
	Description of options and policy	dependencies, including anticipated
#	design assumptions	policy implementation timeframes
4a	Applying a cap adjustment factor to EITE	The cap adjustment factor would need to
	allowance allocation from 2035 onwards	account for the total number of allowances
	that is calibrated with annual allowance	in each annual budget and other forms of
	budgets and other forms of allowance	allowance distribution (e.g. allocation to
	distribution. This option requires identifying	utilities and distribution via auction).
	the rate at which EITE allowance allocation	Anticipated policy implementation
	would need to be reduced each year to align	timeframe:
	with annual allowance budgets.	12-18 months to complete rulemaking to
		establish cap adjustment factors (if
		authorized under statute).
4b	Establishing an annual cap on total no-	Anticipated policy implementation
	cost allowance allocation from 2035	timeframe:
	onwards so that it does not exceed a	18-24 months to complete rulemaking to
	certain proportion of each annual budget.	specify threshold and methods for
	This option would require identifying a	calculating adjustments to allowance
	suitable threshold, taking into account other	allocation (if authorized under statute)
	forms of allowance distribution, and	
	enabling Ecology to adjust EITE allowance	
	allocation on a prorated basis each year to	
	ensure that the total no-cost allowance	
	allocation remains under the designated	
	threshold.	
4c	Prioritizing allowance allocations for	This option would require further work to
	industries manufacturing products that	develop criteria for determining consistency
	are consistent with statewide net-zero	of products or facilities with 2050 emissions
	emissions limits. This option would involve	limits and to design a method for allocating
	the prioritization of diminishing annual	allowances on this basis.
	allowances budget towards EITEs that	
	manufacture products that are consistent	Anticipated policy implementation
	with the achievement of Washington's	timetrame:
	statewide emissions limits, including the	24-36 months to complete rulemaking to
	2050 net-zero requirement, and associated	develop prioritization criteria and methods
	plans and policies, such as the	for allowance allocation (if authorized under
	Comprehensive Climate Action Plan (due to	statute)
	be published in December 2025).	

Description of options and policy design assumptions

#

4d Sector-specific benchmarking and reduction schedules (based on technical pathways) as proposed by Rocky Mountain Institute (RMI)¹³. This option would involve sector-specific benchmarks (mass-based) for 2035 based on projections of each sector's emission reduction ability by 2035 compared to the baseline years (2015-2019), combined with a sector-specific annual reduction in allowances from 2035 onwards based upon technical pathways identified by RMI (i.e. anticipated deployment of technologies and efficiency improvements from 2026-2049). Sectoral benchmarks would need to be adjusted if/when EITE facilities exit or enter the program.

Additional design requirements or dependencies, including anticipated policy implementation timeframes

This option would require further work and engagement with facilities and industry experts to validate the technical pathways identified by RMI, and to assess if/how the mass-based sectoral benchmarks would work within the output-based allocation approach.

Anticipated policy implementation timeframe:

36 months to undertake analysis and engagement and complete rulemaking (if authorized under statute).

¹³ RMI presentation at joint EITE Industries Advisory Group on May 29, 2025: <u>Washington Industries</u> decarbonization pathways, EITEs, and related policies.

Step 1 Assessment of the viability of policy options

	Option 4a - Applying a cap adjustment factor to EITE allowance allocation from 2035 onwards that is calibrated with annual allowance budgets and other forms of allowance	Option 4b - Establishing an annual cap on total no-cost allowance allocation from 2035 onwards so that it does not exceed a certain proportion of each annual budget	Option 4c - Prioritizing allowand allocations for industries manufact products that are consistent wi statewide net-zero emissions lin
Criterion	distribution	V	
Alignment with CCA	Yes.	Yes.	Yes, although need to be clarified in des
option align with Ecology's			phontization chiena and allowance allo mothods
Cap-and-Invest allowance			methous.
budgets (BCW 704 45 020)			
and auctioned allowance			
requirements			
(RCW 70A.65.100)?			
Provides for new market	Yes.	Yes.	Most likely yes, but depends on desig
entrants: Does the option			prioritization criteria and allowance allo
enable new, eligible EITE			methods.
facilities to access no-cost			
allowances?			
Maintains flexibility for	Yes.	Yes.	Yes.
compliance: Does the option			
allow EITEs to identify least			
cost compliance strategies,			
including purchasing, banking,			
and selling of allowances?			
Compatible with market	Yes.	Yes.	Most likely yes (unless any concerns rais
linkage: Is the proposed			CA or QC).
option compatible with plans			
to link Washington's Cap-and-			
Invest market with those in			
California and Quebec?	Vaa	Vaa	
to Step 2?	Yes.	Yes.	to confirm viability.

Table 12. Results of the Step 1 assessment for the three options that were identified for Policy Design Consideration 4.

Summary of Step 1 assessment and additional commentary for Policy Design Consideration 4.

47. The draft assessment for Step 1 indicates that these four options were considered viable for progressing to the Step 2 assessment assuming that screening criteria is revisited to confirm viability for those criteria where there was noted uncertainty. However, it is unclear exactly how Option 4c would align with program allowance budgets and auctioned allowance requirements.

e uring th iits	Option 4d - Sector-specific benchmarking and reduction schedules (based on technical pathways) as proposed by RMI
ign of cation	Yes, based on data provided by RMI the combination of post-2034 sector specific benchmarks and sector-specific reduction schedules should meet this criterion.
n of cation	Most likely yes, albeit requires adjustments to sector-specific benchmarks/reduction schedules when new EITE enter the program.
	Yes.
ed by	Most likely yes (unless any concerns raised by CA or QC).
sited	Yes, assuming screening criteria is revisited to confirm viability.

Step 2 – comparison of viable alternatives

Table 13. Results of the Step 2 assessment for the three viable options assessed in Step 1 for Policy Design Considerations 4.

	Option 4a - Applying a cap adjustment factor to EITE allowance allocation from 2035 onwards that is calibrated with annual allowance budgets and other forms of allowance distribution.			ption 4b - Establishing an annual cap or otal no-cost allowance allocation from 35 onwards so that it does not exceed a ertain proportion of each annual budget	ו ה י.	Option 4c - Prioritizing allowance allocations for industries manufacturing products that are consistent with statewide net-zero emissions limits.	Option 4d – Sector-specific benchmarking and reduction schedules (based on technical pathways) as proposed by RMI		
Criterion	Sc	ore / Summary of Assessment	Sco	ore / Summary of Assessment	ę	Score / Summary of Assessment	Sco	ore / Summary of Assessment	
Mitigates emissions leakage: to what extent does the option include mechanisms to identify and mitigate emissions leakage (i.e. ability to pass through compliance costs & maintain market share)?	-1	Reducing allocation levels may affect leakage risk if facilities have not progressed decarbonization plans and projects by 2035 but this will also depend on trade and climate policy environment in the 2030s and 2040s.	-1	Reducing allocation levels may affect leakage risk if facilities have not progressed decarbonization plans and projects by 2035 but this will also depend on trade and climate policy environment in the 2030s and 2040s.	0	This option may mitigate leakage risk for industries manufacturing products consistent with statewide net-zero emissions limits by signaling a commitment to supporting those industries within WA, but some residual risk may remain depending on trade and climate policy environment in the 2030s and 2040s.	-1	Reducing allocation levels may affect leakage risk if facilities if facilities have not progressed decarbonization projects as anticipated by 2035 but this will also depend on trade and climate policy environment in mid-2030s and 2040s.	
Maintains incentives for decarbonization: to what extent does the option maintain incentives for EITEs to reduce emissions intensity of production within Washington?	1	Provides strong incentives to decarbonize both before and after 2034, but not necessarily in a manner that is linked to statewide net-zero emissions limits and associated plans and policies.	1	Provides strong incentives to decarbonize by or before 2034, but not necessarily in a manner that is linked to statewide net-zero emissions limits and associated plans and policies.	2	Would provide strong and targeted decarbonization incentives linked to statewide net-zero emissions limits and associated plans and policies.	1	Provides strong incentives to decarbonize both before and after 2034, but implies a shift towards mass- based benchmarks with uncertain temporal impacts on incentives and output-based allocation.	
Supports market functionality: to what extent does the option support stable, competitive, and efficient market operations?	2	Provides long term price signal for EITEs (alongside other covered entities), and increases/maintains liquidity and price discovery by maintaining sufficient supply of auctioned allowances.	2	Provides long term price signal for EITEs (alongside other covered entities), and increases/maintains liquidity and price discovery by maintaining sufficient supply of auctioned allowances.	2	Provides long term price signal for EITEs (alongside other covered entities), and increases/maintains liquidity and price discovery by maintaining sufficient supply of auctioned allowances.	2	Provides long term price signal for EITEs (alongside other covered entities), and increases/maintains liquidity and price discovery by maintaining sufficient supply of auctioned allowances.	
Minimizes administrative / implementation costs and technical requirements: to what extent does the option require agency resourcing to implement/can be implemented using existing administrative systems, and additional requirements for EITEs?	1	Can be implemented within current administrative systems, with limited rulemaking.	0	Can be implemented within current administrative systems, with limited rulemaking, but may face technical challenges in implementation.	-1	Likely requires new resources to develop new prioritization criteria and methods for allocating allowances.	-1	Would requires new resources and input from EITEs to validate the technical pathways identified by RMI and/or develop alternative methods for determining technical pathways for EITEs.	
Provides clarity, objectivity, and predictability: to what extent does the option provide clear, objective, and transparent methods to determine future allocations, and enables EITEs to plan for compliance, taking into account estimated policy implementation timeframes?	2	Establishes objective criteria/method for adjusting allowances, provides predictability on allowance allocation once rulemaking completed.	-1	Establishes objective/transparent method, but actual number of allowances would be more variable as it would be adjusted based on production by EITEs both individually and collectively.	0	Would establish an objective/transparent method, but rulemaking may take longer than other options and may introduce uncertainty around prioritization criteria and its impacts on allocation for individual EITEs.	0	Establishes transparent method for allowance allocation, but shift towards mass-based, sectoral benchmarks from 2035 would likely introduce more uncertainty for EITEs on allowance allocation depending on compatibility with output-based allocation.	

	Option 4a - Applying a cap adjustment factor to EITE allowance allocation from 2035 onwards that is calibrated with annual allowance budgets and other forms of allowance distribution.		Or to 20 ce	otion 4b - Establishing an annual cap of otal no-cost allowance allocation from 35 onwards so that it does not exceed rtain proportion of each annual budge	Option 4c - Prioritizing allowance allocations for industries manufacturing products that are consistent with statewide . net-zero emissions limits.			Option 4d – Sector-specific benchmarking and reduction schedules (based on technical pathways) as proposed by RMI
Criterion	Sc	ore / Summary of Assessment	Sco	ore / Summary of Assessment		Score / Summary of Assessment	Sco	re / Summary of Assessment
Accounts for facility-specific conditions: to what extent does the option enable facility-specific circumstances to be taken into account?	0	Could potentially be designed to be differentiated based on certain factors or sectors, such as EITEs with high process emissions (as is done for cap adjustment in California ¹⁴), but generally provides a uniform adjustment unless combined with other options.	-1	Could not take into account facility specific conditions unless combined with other options.	1	Could include facility-specific considerations depending on prioritization criteria and methods for allocating allowances.	0	Depends on the extent to which the technical pathways are based on facility-specific circumstances.

Summary of Step 2 assessment and additional commentary for Policy Design Consideration 4.

48. When comparing these four options, the draft assessment for Step 2 indicates that:

- a) Option 4a scored positively on five of the six criteria and negative on one (Mitigates emissions leakage). The negative score is because Option 4a may potentially increase leakage risk, although this will depend on the ability of EITEs to implement decarbonization projects ahead of 2035 and the international trade and climate policy context in the 2030s and 2040s.
- b) Option 4b scored negatively across three of the six criteria. On this basis Option 4b is considered unsuitable.
- c) Option 4c scored positively or neutral on five of the six criteria and negative on one (Minimizes administrative / implementation costs and technical requirements). The negative score is because Option 4c would require more resourcing and time to implement, and there is greater uncertainty around the allocation criteria and method being a novel approach.
- d) Option 4d scored negatively across three of the six criteria. On this basis Option 4b is considered unsuitable. However, the proposed technical pathways developed by Rocky Mountain Institute could be used to inform any potential differentiation across sectors under Options 4a.

¹⁴ See Table 9-2: Cap Adjustment Factors for Allowance Allocation: <u>Cap-and-Trade Regulation (Unofficial Electronic Version</u>).

Table 14. Summary of scores using Step 2 assessment criteria for all assessed options.

Criterion	Option 1a – Output- based allocation	Option 1b – Monitor carbon pricing policies	Option 1c – CBAM or alternative strategies	Option 2a – Leakage risk assessment	Option 2b – Assistance factor	Option 2c – Purchased electricity allowances	Option 3a – Retain current allocation baselines	Option 3b – Update allocation baselines	Option 3c – Product- based benchmark ing	Option 3d – New facility benchmark ing	Option 3e - Consignment	Option 3f – BAT allocatio n	Option 4a – Cap adjustment factor	Option 4b – Annual allocation cap	Option 4c – Net-zero industry prioritizati on	Option 4d - Sector- specific benchmarking and reduction
Mitigates emissions leakage	2		1	1	2	2	1	2	1	0	1	1	-1	-1	0	-1
Maintains incentives for decarbonization	1		1	0	1	1	1	-1	2	2	2	1	1	1	2	1
Supports market functionality	-1		2	0	1	1	0	0	1	0	2	0	2	2	2	2
Minimizes administrative / implementation costs and technical requirements	1	Not deemed a viable option in Sten 1	-2	-1	-1	-2	2	2	-1	1	-1	-2	1	0	-1	-1
Provides clarity, objectivity, and predictability	2	therefore not assessed in	-2	0	1	1	1	1	1	1	1	-1	2	-1	0	0
Accounts for facility- specific conditions	0	Step 2.	-1	0	-1	0	-1	1	1	0	1	2	0	-1	1	0
Total Positive	4		3	1	4	4	4	4	5	3	5	3	4	2	3	2
Total Negative	1		3	1	2	1	1	1	1	0	1	2	1	3	1	2
Total Neutral	1		0	4	0	1	1	1	0	3	0	1	1	1	2	2

Appendix 1 – Two-Step Assessment Framework used for identifying and assessing potential options for EITE allowance allocation

Step 1 - Criteria for identifying viable alter	native methods or options

Criterion	Assessment Question
Aligns with Ecology's Cap-and-Invest allowance budgets (and statewide emission limits) and auctioned allowance requirements	Will the option ensure total no-cost allocation for EITEs and utilities remain within the program cap and/or annual budget limits established in RCW 70A.45.020 and align with auctioned allowance requirements established in RCW 70A.65.100?
Provides for new market entrants	Does the option enable new, eligible EITE facilities to access no-cost allowances? (i.e. does the option directly or indirectly preclude new EITE facilities from receiving allowances?)
Maintains flexibility for compliance	Does the option allow EITEs to identify least cost compliance strategies, including the purchasing, banking, and selling of allowances?
Compatible with market linkage	Is the proposed policy option compatible with plans to link Washington's Cap- and-Invest market with those in California and Québec?

Step 2 - Criteria for comparing viable alternative options

Criterion	Description	Assessment Question
1. Mitigates emissions leakage	The option mitigates emissions leakage and maintain competitiveness of EITEs.	To what extent does the option include mechanisms to identify and mitigate emissions leakage and maintain competitiveness of EITEs? (i.e. ability to pass through compliance costs & maintain market share)
2. Maintains incentives for decarbonization	The option maintains incentives for innovation and decarbonization, and rewards low carbon/efficient production within Washington.	To what extent does the option maintain incentives for EITEs to reduce emissions intensity of production within Washington?
3. Supports market functionality	The option supports a well-functioning carbon market, including liquidity, stability, price signals, price discovery.	To what extent does the option support stable, competitive, and efficient market operations?
4. Minimizes administrative / implementation costs and technical requirements	The option minimizes administrative and implementation costs and reduces technical complexity for EITE industries.	To what extent does the option require agency resourcing to implement/can be implemented using existing administrative systems, and additional technical requirements for EITEs?
5. Provides clarity, objectivity, and predictability	The option provides clarity, objectivity, and predictability for covered entities and other interested parties	To what extent does the option provide clear, objective, and transparent methods to determine future allocations, and enables EITEs to plan for compliance, taking into account estimated policy implementation timeframes.
6. Accounts for facility- specific conditions	The option enables facility-specific circumstances to be taken into account	To what extent does the option enable facility- specific circumstances (e.g. production and emissions, and implementation timeframes for

			,	fac	cility upgrad	les) to	be tak	ken into account?	
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Standardized scale that was used for assessing options in Step 2

Score	
2	The option fully meets or significantly advances the criterion
1	The option partially meets or advances the criterion
0	The option neither advances nor hinders the criterion
-1	The option partially fails to meet the criterion
-2	The option significantly fails to meet the criterion

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